

IN THE CLAIMS:

Please cancel claims 17-19, 23-25, and 37-39, add claims 43 and 44, and amend claims 1, 5, 9, 13, 20, 26, 29, 33, and 40 as follows:

1. (Currently Amended) A sound recording/reproducing method in a sound recording/reproducing apparatus for recording sound data onto a recording medium and reproducing said sound data from said recording medium comprising:

an attribute information recording step of recording, onto ~~[[a]]~~ the recording medium, attribute information on sound data of a music piece that are to be recorded onto ~~[[said]]~~ the recording medium;

a rule table creation step of creating a rule table that associates the attribute information and digital signal processor (DSP) program parameters each designating, to a digital signal processor of an amplifier apparatus, a sound field process or a frequency characteristic process to be performed;

a DSP program parameter acquisition step of, at a time of reproduction when sound data of a music piece to be reproduced, read out from said recording medium, are to be outputted to said amplifier apparatus that is currently connected to said sound recording/reproducing apparatus, acquiring, from said recording medium, the attribute information on the sound data of the music piece to be reproduced and acquiring, from said rule table, any of the DSP program parameters that corresponds to the attribute information;

a step of using, when a model of an amplifier apparatus that is the object of control during creation of said rule table and a model of said amplifier apparatus that is currently connected to said sound recording/reproducing apparatus coincide with each

other, said DSP program parameter acquired from said rule table as a DSP program parameter after completion of the acquisition process;

a step of using, when the model of an amplifier apparatus that is the object of control during creation of said rule table differs from the model of said amplifier apparatus that is currently connected to said sound recording/reproducing apparatus, a DSP program parameter acquired from said rule table and a DSP program parameter corresponding to said amplifier apparatus that is currently connected to said sound recording/reproducing apparatus from a DSP program associating table that associates DSP program parameters of a plurality of amplifier apparatuses, and using said DSP program parameter acquired from said DSP program associating table as a DSP program parameter after completion of the acquisition process; and

a DSP program parameter setting step of setting the DSP program parameter after completion of the acquisition step, in said digital signal processor of said amplifier apparatus that is currently connected to said sound recording/reproducing apparatus.

2. (Original) A sound recording/reproducing method as claimed in claim 1 wherein, when a change has been made to the sound field process or frequency characteristic process of said amplifier apparatus during reproduction of the sound data of the music piece, there is performed a learning step of registering, in said rule table, a DSP program parameter indicative of the changed sound field process or frequency characteristic process in association with the attribute information of the sound data being currently reproduced.

3. (Original) A sound recording/reproducing method as claimed in claim 1 wherein the attribute information on the sound data of the music piece includes music

piece information identifying the music piece, album information identifying an album to which the music piece belongs, artist information identifying an artist of the music piece, and genre information identifying a musical genre of the music piece.

4. (Original) A sound recording/reproducing method as claimed in claim 1 wherein the attribute information on the sound data of the music piece includes compression scheme information indicative of a compression scheme with which the sound data are recorded on said recording medium.

5. (Currently Amended) A sound recording/reproducing method in a sound recording/reproducing apparatus for recording sound data onto a recording medium and reproducing said sound data from said recording medium comprising:

an attribute information recording step of recording, onto a recording medium, attribute information on sound data of a music piece that are to be recorded onto [[said]] the recording medium;

a rule table creation step of creating a rule table that associates the attribute information, digital signal processor (DSP) program parameters each designating, to a digital signal processor of an amplifier apparatus, a sound field process [[of]] or frequency characteristic process to be performed and processing start times each designating a time when the process is to be started;

a DSP program parameter acquisition step of, at a time of reproduction when sound data of a music piece to be reproduced, read out from said recording medium, are to be outputted to said amplifier apparatus which is currently connected to said sound recording/reproducing apparatus, acquiring, from said rule table, any of the DSP program parameters that corresponds to the attribute information on the sound data and

corresponds to any one of the processing start times that has coincided with an elapsed reproducing time of the sound data; and

a DSP program parameter setting step of setting the DSP program parameter, acquired from said rule table, in said digital signal processor of said amplifier apparatus currently connected to said sound recording/reproducing apparatus.

6. (Original) A sound recording/reproducing method as claimed in claim 5 wherein, when a change has been made to the sound field process or frequency characteristic process of said amplifier apparatus during reproduction of the sound data of the music piece, there is performed a learning step of registering, in said rule table, a DSP program parameter indicative of the changed sound field process or frequency characteristic process in association with the attribute information of the sound data being currently reproduced.

7. (Original) A sound recording/reproducing method as claimed in claim 5 wherein the attribute information on the sound data of the music piece includes music piece information identifying the music piece, album information identifying an album to which the music piece belongs, artist information identifying an artist of the music piece, and genre information identifying a musical genre of the music piece.

8 (Original) A sound recording/reproducing method as claimed in claim 5 wherein the attribute information on the sound data of the music piece includes compression scheme information indicative of a compression scheme with which the sound data are recorded on said recording medium.

9. (Currently Amended) A sound recording/reproducing apparatus comprising:
a recording medium on which sound data can be recorded and reproduced;

an attribute information recording section that records, onto said recording medium, attribute information on sound data of a music piece that are to be recorded onto said recording medium;

a rule table creation section that creates a rule table that associates ~~the attribute information and~~ digital signal processor (DSP) program parameters each designating, to a digital signal processor of an amplifier apparatus, a sound field process or frequency characteristic process to be performed, processing start times each designating a time when said process is to be started and said attribute information;

a DSP program parameter acquisition section that, at a time of reproduction when sound data of a music piece to be reproduced, read out from said recording medium, are to be outputted to said amplifier apparatus, ~~acquires, from said recording medium, the attribute information on the sound data and acquires, from said rule table, any of the DSP program parameters that correspond to the attribute information~~ which is currently connected to said sound recording/reproducing apparatus, acquires, from said rule table, any of the DSP program parameters that corresponds to the attribute information of sound data of a music piece to be reproduced and corresponds to a process start time which coincides with an elapsed reproducing time of the sound data; and

a DSP program parameter setting section that sets the DSP program parameter, acquired from said rule table, in said digital signal processor of said amplifier apparatus which is currently connected to said sound recording/reproducing apparatus.

10. (Original) A sound recording/reproducing apparatus as claimed in claim 9 which further comprises a learning section that, when a change has been made to the sound field process or frequency characteristic process of said amplifier apparatus during

reproduction of the sound data of the music piece, registers, in said rule table, a DSP program parameter indicative of the changed sound field process or frequency characteristic process in association with the attribute information of the sound data being currently reproduced.

11. (Original) A sound recording/reproducing apparatus as claimed in claim 9 wherein the attribute information on the sound data of the music piece includes music piece information identifying the music piece, album information identifying an album to which the music piece belongs, artist information identifying an artist of the music piece, and genre information identifying a musical genre of the music piece.

12. (Original) A sound recording/reproducing apparatus as claimed in claim 9 wherein the attribute information on the sound data of the music piece includes compression scheme information indicative of a compression scheme with which the sound data are recorded on said recording medium.

13. (Currently Amended) A sound recording/reproducing apparatus comprising:
a recording medium on which sound data can be recorded and reproduced;
an attribute information recording section that records, onto said recording medium, attribute information on sound data of a music piece that are to be recorded onto said recording medium;

a rule table creation section that creates a rule table that associates the attribute information, digital signal processor (DSP) program parameters each designating, to a digital signal processor of an amplifier apparatus, a sound field process or frequency characteristic process to be performed and processing start times each designating a time when the process is to be started;

a DSP program parameter acquisition section that, at a time of reproduction when sound data of a music piece to be reproduced, read out from said recording medium, are to be outputted to said amplifier apparatus which is currently connected to said sound recording/reproducing apparatus, acquires, from said recording medium attribute information of sound data to be reproduced and acquires, from said rule table, any of the DSP program parameters that corresponds to the attribute information on the sound data and corresponds to any one of the processing start times that has coincided with an elapsed reproducing time of the sound data;

a section that uses, when a model of an amplifier apparatus, that is the object of control during creation of said rule table and a model of said amplifier apparatus that is currently connected to said sound recording/reproducing apparatus coincide with each other, said DSP program parameter acquired from said rule table as a DSP program parameter after completion of the acquisition process;

a DSP program associating table associating DSP program parameters of a plurality of amplifier apparatus;

a section that acquires, when the model of an amplifier apparatus that is the object of control during creation of said rule table differs from the model of said amplifier apparatus that is currently connected to said sound recording/reproducing apparatus, a DSP program parameter corresponding to said amplifier apparatus that is currently connected to said sound recording/reproducing apparatus from said DSP program associating table, and uses said DSP program associating table as a DSP program parameter after completion of the acquisition process; and

a DSP program parameter setting section that sets the DSP program parameter

after completion of the acquisition process, acquired from said rule table, in said digital signal processor of said amplifier apparatus currently connected to said sound recording/reproducing apparatus.

14. (Original) A sound recording/reproducing apparatus as claimed in claim 13 which further comprises a learning section that, when a change has been made to the sound field process or frequency characteristic process of said amplifier apparatus during reproduction of the sound data of the music piece, registers, in said rule table, a DSP program parameter indicative of the changed sound field process or frequency characteristic process in association with the attribute information of the sound data being currently reproduced.

15. (Original) A sound recording/reproducing apparatus as claimed in claim 13 wherein the attribute information on the sound data of the music piece includes music piece information identifying the music piece, album information identifying an album to which the music piece belongs, artist information identifying an artist of the music piece, and genre information identifying a musical genre of the music piece.

16. (Original) A sound recording/reproducing apparatus as claimed in claim 13 wherein the attribute information on the sound data of the music piece includes compression scheme information indicative of a compression scheme with which the sound data are recorded on said recording medium.

17. (Canceled)

18. (Canceled)

19. (Canceled)

20. (Currently Amended) A sound recording/reproducing method in a sound recording/reproducing apparatus for recording sound data onto a recording medium and reproducing said sound data from said recording medium comprising:

a recorded level recording step of, when a succession of sound data are to be recorded onto [[a]] the recording medium, detecting a recorded level of the succession of the sound data and recording, onto [[said]] the recording medium, the detected recorded level in association with the succession of the sound data; and

a volume control step of, when sound data read out from the recording medium are to be output to an amplifier apparatus which is currently connected to said sound recording/reproducing apparatus having a volume control ~~capable of~~ being controlled from outside, acquiring a recorded level corresponding to a succession of the sound data to be reproduced and controlling the volume control of the amplifier apparatus currently connected to said sound recording/reproducing apparatus on the basis of the acquired recorded level and a reference recorded level.

21. (Original) A sound recording/reproducing method as claimed in claim 20 wherein a predetermined value is set as the reference recorded level.

22. (Original) A sound recording/reproducing method as claimed in claim 20 wherein the reference recorded level is determined on the basis of a plurality of recorded levels corresponding to a plurality of successions of sound data to be reproduced.

23. (Canceled)

24. (Canceled)

25. (Canceled)

26. (Currently Amended) A sound recording/reproducing apparatus comprising:

a recording medium on which sound data can be recorded and reproduced;

a recorded level detection section that, when a succession of sound data are to be recorded onto said recording medium, detects a recorded level of the succession of the sound data;

a recorded level detection section that records the recorded level, detected by said recorded level detection section, onto said recording medium in association with the succession of the sound data; and

a recorded level acquisition section that, at a time of reproduction when sound data read out from said recording medium are to be output to an amplifier apparatus which is currently connected to said sound recording/reproducing apparatus having a volume control ~~capable of~~ being controlled from outside, acquires a recorded level corresponding to a succession of the sound data to be reproduced; and

a volume control section that controls the volume control of the amplifier apparatus currently connected to said sound recording/reproducing apparatus on the basis of the acquired recorded level and a reference recorded level.

27. (Original) A sound recording/reproducing apparatus as claimed in claim 26 wherein a predetermined value is set as the reference recorded level.

28. (Original) A sound recording/reproducing apparatus as claimed in claim 26 wherein the reference recorded level is determined on the basis of a plurality of recorded levels corresponding to a plurality of successions of sound data to be reproduced.

29. (Currently Amended) A sound recording/reproducing apparatus comprising:

a recording medium on which sound data can be recorded and reproduced;

attribute information recording means for recording, onto said recording medium,

attribute information on sound data of a music piece that are to be recorded onto said recording medium;

rule table creation means for creating a rule table that associates digital signal processor (DSP) program parameters each designating, the attribute information and DSP program parameters each designating, to a digital signal processor of an amplifier apparatus, a sound field process or a frequency characteristic process to be performed, processing start times each designating a time when said process is to be started and said attribute information;

DSP program parameter acquisition means for, at a time of reproduction when sound data of a music piece to be reproduced, read out from said recording medium, are to be outputted to said amplifier apparatus which is currently connected to said sound recording/reproducing apparatus, acquiring, from said recording medium, the attribute information on the sound data and acquiring, from said rule table, any of the DSP program parameters that corresponds to the attribute information of sound data of a music piece to be reproduced and corresponding to a process start time which coincides with an elapsed reproducing time of the sound data; and

DSP program parameter setting means for setting the DSP program parameter, acquired from said rule table, in said digital signal processor of said amplifier apparatus that is currently connected to said sound recording/reproducing apparatus.

30. (Original) A sound recording/reproducing apparatus as claimed in claim 29 which further comprises learning means for, when a change has been made to the sound field process or frequency characteristic process of said amplifier apparatus during reproduction of the sound data of the music piece, registering, in said rule table, a DSP

program parameter indicative of the changed sound field process or frequency characteristic process in association with the attribute information of the sound data being currently reproduced.

31. (Original) A sound recording/reproducing apparatus as claimed in claim 29 wherein the attribute information on the sound data of the music piece includes music piece information identifying the music piece, album information identifying an album to which the music piece belongs, artist information identifying an artist of the music piece, and genre information identifying a musical genre of the music piece.

32. (Original) A sound recording/reproducing apparatus as claimed in claim 29 wherein the attribute information on the sound data of the music piece includes compression scheme information indicative of a compression scheme with which the sound data are recorded on said recording medium.

33. (Currently Amended) A sound recording/reproducing apparatus comprising:
a recording medium on which sound data can be recorded and reproduced;
attribute information recording means for recording, onto said recording medium, attribute information on sound data of a music piece that are to be recorded onto said recording medium;

rule table creation means for creating a rule table that associates the attribute information, digital signal processor (DSP) program parameters each designating, to a digital signal processor of an amplifier apparatus which is currently connected to said sound recording/reproducing apparatus, a sound field process or frequency characteristic process to be performed and processing start times each designating a time when the process is to be started;

DSP program parameter acquisition means for, at a time of reproduction when sound data of a music piece to be reproduced, read out from said recording medium, are to be outputted to said amplifier apparatus, acquiring, from said rule table, any of the DSP program parameters that corresponds to the attribute information on the sound data and corresponds to any one of the processing start times that has coincided with an elapsed reproducing time of the sound data; and

DSP program parameter setting means for setting the DSP program parameter, acquired from said rule table, in said digital signal processor of said amplifier apparatus currently connected to said sound recording/reproducing apparatus.

34. (Original) A sound recording/reproducing apparatus as claimed in claim 33 which further comprises learning means for, when a change has been made to the sound field process or frequency characteristic process of said amplifier apparatus during reproduction of the sound data of the music piece, registering, in said rule table, a DSP program parameter indicative of the changed sound field process or frequency characteristic process in association with the attribute information of the sound data being currently reproduced.

35. (Original) A sound recording/reproducing apparatus as claimed in claim 33 wherein the attribute information on the sound data of the music piece includes music piece information identifying the music piece, album information identifying an album to which the music piece belongs, artist information identifying an artist of the music piece, and genre information identifying a musical genre of the music piece.

36. (Original) A sound recording/reproducing apparatus as claimed in claim 33 wherein the attribute information on the sound data of the music piece includes compression scheme information indicative of a compression scheme with which the data are recorded on said recording.

37. (Canceled)

38. (Canceled)

39. (Canceled)

40. (Currently Amended) A sound recording/reproducing apparatus comprising:
a recording medium on which sound data can be recorded and reproduced;
recorded level detection means for, when a succession of sound data are to be recorded onto said recording medium, detecting a recorded level of the succession of the sound data;

the recorded level detection means for recording the recorded level, detected by said recorded level detection means, onto said recording medium in association with the succession of the sound data; and

recorded level acquisition means for, at a time of reproduction when sound data read out from said recording medium are to be output to an amplifier apparatus that is currently connected to said sound recording/reproducing apparatus having a volume control ~~capable of being controlled from outside~~, acquiring a recorded level corresponding to a succession of the sound data to be reproduced; and

volume control means for controlling the volume control of the amplifier apparatus on the basis of the acquired recorded level and a reference recorded level.

41. (Original) A sound recording/reproducing apparatus as claimed in claim 40 wherein a predetermined value is set as the reference recorded level.
42. (Original) A sound recording/reproducing apparatus as claimed in claim 40 wherein the reference recorded level is determined on the basis of a plurality of recorded levels corresponding to a plurality of successions of sound data to be reproduced.
43. (New) A sound recording/reproducing method as claimed in claim 5 further comprising, between said DSP program parameter acquisition step and said DSP program parameter setting step:

a step of using, when the model of an amplifier apparatus that is the object of control during creation of said rule table and the model of said amplifier apparatus that is currently connected to said sound recording/reproducing apparatus coincide with each other, said DSP program parameter acquired from said rule table as a DSP program parameter after completion of the acquisition process; and

a step of acquiring, when the model of an amplifier apparatus that is the object of control during creation of said rule table differs from the model of said amplifier apparatus that is currently connected to said sound recording/reproducing apparatus, a DSP program parameter acquired from said rule table and a DSP program parameter corresponding to said amplifier apparatus that is currently connected to said sound recording/reproducing apparatus from a DSP program associating table that associates DSP program parameters of a plurality of amplifier apparatuses, and using said DSP program parameter acquired from said DSP program associating table as a DSP program parameter after completion of the acquisition process;

said DSP Program parameter setting step setting the DSP program parameter after

completion of the acquisition process, in said digital signal Processor of said amplifier apparatus that is currently connected to said sound recording/reproducing apparatus.

44. (New) A sound recording/reproducing apparatus as claimed in claim 9 further including:

a section that uses, when the model of an amplifier apparatus that is the object of control during creation of said rule table and the model of said amplifier apparatus that is currently connected to said sound recording/reproducing apparatus coincide with, each other, said DSP program parameter acquired from said rule table as a DSP program parameter after completion of the acquisition process;

a DSP program associating table associating DSP program parameters of a plurality of amplifier apparatus; and

a section that acquires, when the model of an amplifier apparatus that is the object of control during creation of said rule table differs from the model of said amplifier apparatus that is currently connected to said sound recording/reproducing apparatus, a DSP program parameter acquired from said rule table and a DSP program parameter corresponding to said amplifier apparatus that is currently connected to said sound recording/reproducing apparatus from said DSP program associating table as a DSP program parameter acquired from said DSP program associating table as a DSP Program parameter after completion of the acquisition process;

said DSP program parameter setting section setting the DSP program parameter after completion of the acquisition process, in said digital signal processor of said amplifier apparatus that is currently connected to said sound recording/reproducing apparatus.

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